

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:24:16 ON 09 JUN 2004

=> FIL HOME

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

FULL ESTIMATED COST

0.06

0.27

FILE 'HOME' ENTERED AT 14:24:28 ON 09 JUN 2004

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

FULL ESTIMATED COST

0.21

0.48

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 14:24:41 ON 09 JUN 2004

70 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s ((acid(3a)protease) or (acid(3a)proteinase))

13 FILE ADISCTI
3 FILE ADISINSIGHT
4 FILE ADISNEWS
558 FILE AGRICOLA
20 FILE ANABSTR
169 FILE AQUASCI
193 FILE BIOBUSINESS
13 FILE BIOCOMMERCE
3921 FILE BIOSIS
830 FILE BIOTECHABS
830 FILE BIOTECHDS
929 FILE BIOTECHNO
1062 FILE CABA
310 FILE CANCERLIT

14 FILES SEARCHED...

8105 FILE CAPLUS
147 FILE CEABA-VTB
9 FILE CEN
14 FILE CIN
82 FILE CONFSCI
12 FILE CROPB
25 FILE CROPU
178 FILE DISSABS
92 FILE DDFB
110 FILE DDFU
3899 FILE DGENE

25 FILES SEARCHED...

92 FILE DRUGB
164 FILE DRUGU
1 FILE IMSRESEARCH
5 FILE EMBAL
2008 FILE EMBASE
685 FILE ESBIODBASE
34 FILE FEDRIP
5 FILE FOREGE

235 FILE FROSTI
 620 FILE FSTA
 38 FILES SEARCHED...
 1197 FILE GENBANK
 5 FILE HEALSAFE
 682 FILE IFIPAT
 1 FILE IMSPRODUCT
 342 FILE JICST-EPLUS
 4 FILE KOSMET
 1026 FILE LIFESCI
 2104 FILE MEDLINE
 45 FILE NIOSHTIC
 28 FILE NTIS
 48 FILE OCEAN
 968 FILE PASCAL

53 FILES SEARCHED...
 4 FILE PHAR
 1 FILE PHARMAML
 4 FILE PHIN
 86 FILE PROMT
 83 FILE PROUSDDR
 5 FILE RDISCLOSURE
 2105 FILE SCISEARCH
 3 FILE SYNTHLINE
 1259 FILE TOXCENTER
 4023 FILE USPATFULL
 215 FILE USPAT2
 3 FILE VETB
 18 FILE VETU
 1172 FILE WPIDS

68 FILES SEARCHED...
 6 FILE WPIFV
 1172 FILE WPINDEX

63 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L1 QUE ((ACID(3A) PROTEASE) OR (ACID(3A) PROTEINASE))

=> s l1 (1) (fusarium oxysporum)

1 FILE AGRICOLA
 2 FILE BIOSIS
 1 FILE BIOTECHABS
 1 FILE BIOTECHDS
 2 FILE BIOTECHNO
 1 FILE CABA

14 FILES SEARCHED...
 8 FILE CAPLUS
 2 FILE CROPU
 1 FILE DDFU

25 FILES SEARCHED...
 1 FILE DRUGU
 1 FILE EMBASE
 2 FILE ESBIODBASE

38 FILES SEARCHED...
 2 FILE IFIPAT
 1 FILE LIFESCI
 1 FILE MEDLINE
 1 FILE PASCAL

58 FILES SEARCHED...
 2 FILE SCISEARCH
 1 FILE TOXCENTER
 79 FILE USPATFULL
 9 FILE USPAT2
 3 FILE WPIDS

68 FILES SEARCHED...

3 FILE WPINDEX

22 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L2 QUE L1 (L) (FUSARIUM OXYSPORUM)

=> s l1 (10a) (fusarium oxysporum)

12 FILES SEARCHED...

4 FILE CAPLUS

25 FILES SEARCHED...

38 FILES SEARCHED...

1 FILE IFIPAT

55 FILES SEARCHED...

1 FILE USPATFULL

68 FILES SEARCHED...

3 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L3 QUE L1 (10A) (FUSARIUM OXYSPORUM)

=> d rank

F1 4 CAPLUS

F2 1 IFIPAT

F3 1 USPATFULL

=> file hits

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

8.55

9.03

FILE 'CAPLUS' ENTERED AT 14:33:41 ON 09 JUN 2004

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FILE 'USPATFULL' ENTERED AT 14:33:41 ON 09 JUN 2004

CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l3

L4 6 L3

=> dup rem l4

PROCESSING COMPLETED FOR L4

L5 5 DUP REM L4 (1 DUPLICATE REMOVED)

ANSWERS '1-4' FROM FILE CAPLUS

ANSWER '5' FROM FILE IFIPAT

=> d bib abs 1-5

L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:486094 CAPLUS

DN 139:260027

TI Trypsin-like protease (TLP) production in Fusarium oxysporum and Fusarium venenatum and use of the TLP promoter for recombinant protein (glucoamylase) production

AU Farnworth, Natalie E.; Robson, Geoffrey D.; Trinci, Anthony P. J.; Wiebe, Marilyn G.

CS School of Biological Sciences, University of Manchester, Manchester, M13 9PT, UK

SO Enzyme and Microbial Technology (2003), 33(1), 85-91

CODEN: EMTED2; ISSN: 0141-0229

PB Elsevier Science
 DT Journal
 LA English
 AB The production of native trypsin-like protease (TLP) in wild type strains of *Fusarium oxysporum* (214) and *F. venenatum* (A3/5) was assessed and compared with the expression of recombinant glucoamylase (GAM) under the *F. oxysporum* TLP promoter in *F. venenatum* JeRS 325. In the two non-recombinant strains, TLP was only detected in the supernatants of batch cultures after the onset of stationary phase and TLP production was highest in the presence of a proteinaceous nitrogen source at pH 7.5. In chemostat cultures of *F. oxysporum*, the specific TLP production rate was neg. correlated with specific growth rate ($\mu=0.03-0.09\text{ h}^{-1}$). In *F. venenatum*, A3/5 at dilution rates between 0.06 and 0.15 h^{-1} , specific TLP production was also neg. correlated with specific growth rate. The *F. oxysporum* TLP promoter regulates GAM production in *F. venenatum* JeRS 325, but the specific GAM production rate is known to be constant between 0.05 and 0.19 h^{-1} , showing that regulation of the promoter in the recombinant host differs from that in the native strain. Western blot anal. demonstrated that GAM production began in batch cultures of *F. venenatum* JeRS 325 during the decelerating growth phase, and that de novo synthesis of GAM occurred during stationary phase.

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2000:283653 CAPLUS
 DN 133:55767
 TI Effect of caffeoylshikimic acid of date palm roots on activity and production of *Fusarium oxysporum* f. sp. *albedinis* cell wall-degrading enzymes
 AU El Modafar, C.; Tantaoui, A.; El Boustani, E.
 CS Laboratoire de Biotechnologie et Physiopathologie Vegetales, Faculte des Sciences et Techniques de Gueliz, Departement de Biologie, Marrakech, Morocco
 SO Journal of Phytopathology (2000), 148(2), 101-108
 CODEN: JPHYEB; ISSN: 0931-1785
 PB Blackwell Wissenschafts-Verlag GmbH
 DT Journal
 LA French
 AB Caffeoylshikimic acid (CSA), a major phenolic compound of date palm roots, represents one of the resistance factors of the host to *Fusarium oxysporum* f. sp. *albedinis*. The CSA was tested at various concns. (0.25 to 3 $\mu\text{mol/mL}$) on the activity and the production of *F. oxysporum* f. sp. *albedinis* cell wall-degrading enzymes (CWDE): proteases, cellulases, pectin methylesterases (PME), polygalacturonases (PG) and polygalacturonate trans-eliminases (PGTE). CSA had very little effect on the activity of the various enzymes, although it greatly reduced their production. The mycelial growth was also affected by CSA, but this does not explain why only the production of CWDE was noticeably reduced. In order to explain this differential effect of CSA on the activity and production of CWDE, in one group of expts. the effect of the products of hydrolysis of CSA (caffeic acid and shikimic acid) was tested and in another, the effect of the products of CSA (quinones) obtained by tyrosinase oxidation was investigated. Shikimic acid did not have a significant effect on the activity of the CWDE but weakly inhibited their production. Caffeic acid showed a larger inhibition of the activity of the various CWDE that was greater than that of CSA, and its inhibiting effect appeared to be more important during their production. The oxidation of CSA by tyrosinase was accompanied by a greater inhibition of the activity of the various CWDE. This inhibition was appreciable in comparison with that observed due to the effect of non-oxidized CSA on CWDE production. In the same way, oxidation of caffeic acid provoked a greater inhibiting effect on the activity of CWDE than unoxidized caffeic acid. These results suggest that CSA generates products of hydrolysis (in particular, caffeic acid) and products of oxidation (quinones) which inhibit the activity of the proteolytic,

cellulolytic and pectinolytic enzymes produced by *F. oxysporum* f. sp. albedinis in the culture medium.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:340823 CAPLUS
DN 122:127548
TI Trypsin-like protease of *Fusarium*, its manufacture with recombinant cells,
and its use in detergent compositions
IN Branner, Sven; Hastrup, Sven
PA Novo Nordisk A/S, Den.
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2

DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9425583	A1	19941110	WO 1994-DK177	19940504
	W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9467203	A1	19941121	AU 1994-67203	19940504
	CN 1125465	A	19960626	CN 1994-192515	19940504
	US 5693520	A	19971202	US 1995-553516	19951103
PRAI	DK 1993-523		19930505		
	WO 1994-DK177		19940504		
AB	A trypsin-like protease from <i>Fusarium oxysporum</i> DSM 2672, cDNA encoding the protease, a DNA construct or vector containing this cDNA, and a method of preparing the protease with recombinant cells containing the vector are claimed.				

The protease may be used in detergent compns. The cDNA for *F. oxysporum* protease was cloned, sequenced, and expressed in *Aspergillus oryzae*. The protease was produced in an inactive prepro form. To convert it to an active form, an aspartyl protease isolated from *F. oxysporum* supernatants was added to the fermentation medium. The protease showed a reversed Arg/Lys specificity relative to bovine trypsin, i.e., it is more Arg-active than Lys-active. The enzyme was a broad activity optimum between pH 8 and 11 and a temperature optimum of .apprx.40° (at pH 9.5) when using D-Val-Leu-Lys-pNA as substrate.

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:675327 CAPLUS
DN 115:275327
TI Effect of substrate and pH on the activity of proteases from *Fusarium oxysporum* var. lini
AU Castro, Ieso Miranda; Lima, Angelica Alves; Paula, Carmem Aparecida; Nicoli, Jacuges Robert; Brandao, Rogelio Lopes
CS Dep. Ind., Univ. Fed. Ouro Preto, Ouro Preto, 35400, Brazil
SO Journal of Fermentation and Bioengineering (1991), 72(2), 132-4
CODEN: JFBIEX; ISSN: 0922-338X

DT Journal
LA English

AB The results obtained in this work suggest that both the pH (through selective inhibition) and the carbon source (through repression and acidification or alkalization of the medium) may play an important role in the distribution of extracellular proteases in *F. oxysporum* var. lini.

L5 ANSWER 5 OF 5 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 1
AN 10277371 IFIPAT;IFIUDB;IFICDB
TI USE OF ACID-STABLE SUBTILISIN PROTEASES IN ANIMAL FEED; ADJUSTING NUTRIENT IN ANIMAL FEEDS
INF Klunter; Anna-Marie, Loerrach, DE

Oestergaard; Peter Rahbek, Virum, DK
 Sjoeholm; Carsten, Alleroed, DK
 IN Klunter Anna-Marie (DE); Oestergaard Peter Rahbek (DK); Sjoeholm Carsten (DK)
 PAF Unassigned
 PA Unassigned Or Assigned To Individual (68000)
 AG PATREA L. PABST HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER, 1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400, US
 PI US 2003021774 A1 20030130
 AI US 2001-779334 20010208
 PRAI DK 2000-200 20000208
 US 2000-183133P 20000217 (Provisional)
 FI US 2003021774 20030130
 DT Utility; Patent Application - First Publication
 FS CHEMICAL APPLICATION
 CLMN 12
 GI 6 Figure(s).

FIG. 1 shows pH-stability curves, viz. residual protease activity of four proteases (one acid-stable protease of the subtilisin family derived from *Bacillus* sp. NCIMB 40484 (PD 498), and three reference proteases (Sub.Novo, and Sub.Novo(Y217L), both derived from *Bacillus amyloliquefaciens*, and SAVINASE tm) after incubation for 2 hours, at a temperature of 37 degrees C., and at pH-values in the range of pH 2 to pH 11; the activity is relative to residual activity after a 2 hour incubation at pH 9.0, and 5 degrees C.;

FIG. 2 shows pH-activity curves, viz. protease activity between pH 3 and pH 11, relative to the protease activity at pH-optimum, of the same four proteases;

FIG. 3 shows temperature-activity curves at pH 9.0, viz. protease activity at pH 9.0 between 15 degrees C. and 80 degrees C., relative to protease activity at the optimum temperature, of the same four proteases;

FIG. 4 shows pH-stability curves similar to FIG. 1 but for six other **acid-stable proteases** of the subtilisin family derived from *Bacillus alcalophilus* NCIMB 10438, **Fusarium oxysporum** IFO 4471, *Paecilomyces lilacinus* CBS 102449, *Aspergillus* sp. CBS 102448, *Acremonium chrysogenum* ATCC 48272, *Acremonium kiliense* ATCC 20338;

FIG. 5 shows pH-activity curves similar to FIG. 2 but for the same proteases as in FIG. 4; and

FIG. 6 shows temperature activity curves at pH 9.0 similar to FIG. 3 but for the same proteases as in FIG. 4.

AB Acid-stable proteases of the subtilisin family, their use in animal feed, feed-additives and feed compositions containing such proteases, and methods for the treatment of vegetable proteins using such proteases.

CLMN 12 6 Figure(s).

FIG. 1 shows pH-stability curves, viz. residual protease activity of four proteases (one acid-stable protease of the subtilisin family derived from *Bacillus* sp. NCIMB 40484 (PD 498), and three reference proteases (Sub.Novo, and Sub.Novo(Y217L), both derived from *Bacillus amyloliquefaciens*, and SAVINASE tm) after incubation for 2 hours, at a temperature of 37 degrees C., and at pH-values in the range of pH 2 to pH 11; the activity is relative to residual activity after a 2 hour incubation at pH 9.0, and 5 degrees C.;

FIG. 2 shows pH-activity curves, viz. protease activity between pH 3 and pH 11, relative to the protease activity at pH-optimum, of the same four proteases;

FIG. 3 shows temperature-activity curves at pH 9.0, viz. protease activity at pH 9.0 between 15 degrees C. and 80 degrees C., relative to protease activity at the optimum temperature, of the same four proteases;

FIG. 4 shows pH-stability curves similar to FIG. 1 but for six other **acid-stable proteases** of the subtilisin family derived from *Bacillus alcalophilus* NCIMB 10438, **Fusarium oxysporum** IFO 4471, *Paecilomyces lilacinus* CBS 102449, *Aspergillus* sp. CBS 102448, *Acremonium chrysogenum* ATCC 48272, *Acremonium*

kiliense ATCC 20338;
 FIG. 5 shows pH-activity curves similar to FIG. 2 but for the same
 proteases as in FIG. 4; and
 FIG. 6 shows temperature activity curves at pH 9.0 similar to FIG. 3 but
 for the same proteases as in FIG. 4.

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
28.76	37.79

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-2.77	-2.77

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 BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,
 CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU,
 DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 14:35:13 ON 09 JUN 2004

70 FILES IN THE FILE LIST IN STNINDEX

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 search error messages that display as 0* with SET DETAIL OFF.

=> s l1 (10a) (paecilomyces lilacinus)

13 FILES SEARCHED...

25 FILES SEARCHED...

38 FILES SEARCHED...

50 FILES SEARCHED...

64 FILES SEARCHED...

0 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L6 QUE L1 (10A) (PAECILOMYCES LILACINUS)

=> s l1 (1) (paecilomyces lilacinus)

13 FILES SEARCHED...

25 FILES SEARCHED...

38 FILES SEARCHED...

1 FILE IFIPAT

57 FILES SEARCHED...

5 FILE USPATFULL

68 FILES SEARCHED...

2 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L7 QUE L1 (L) (PAECILOMYCES LILACINUS)

=> d rank

F1 5 USPATFULL

F2 1 IFIPAT

=> file hits

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
5.13	42.92

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-2.77

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FILE 'IFIPAT' ENTERED AT 14:40:39 ON 09 JUN 2004
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=> s 17

L8 6 L7

=> dup rem 18

PROCESSING COMPLETED FOR L8

L9 5 DUP REM L8 (1 DUPLICATE REMOVED)
ANSWERS '1-5' FROM FILE USPATFULL

=> d bib abs 1-5

L9 ANSWER 1 OF 5 USPATFULL on STN DUPLICATE 1
AN 2003:29832 USPATFULL
TI Use of acid-stable subtilisin proteases in animal feed
IN Sjoeholm, Carsten, Alleroed, DENMARK
Oestergaard, Peter Rahbek, Virum, DENMARK
Kluenter, Anna-Marie, Loerrach, GERMANY, FEDERAL REPUBLIC OF
PI US 2003021774 A1 20030130
AI US 2001-779334 A1 20010208 (9)
PRAI DK 2000-200 20000208
US 2000-183133P 20000217 (60)
DT Utility
FS APPLICATION
LREP PATREA L. PABST, HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER,
1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 1780
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Acid-stable proteases of the subtilisin family, their use in animal
feed, feed-additives and feed compositions containing such proteases,
and methods for the treatment of vegetable proteins using such
proteases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 2 OF 5 USPATFULL on STN
AN 2003:288709 USPATFULL
TI Novel variant EGIIII-like cellulase compositions
IN Gualfetti, Peter, San Francisco, CA, UNITED STATES
Mitchinson, Colin, Half Moon Bay, CA, UNITED STATES
Phillips, Jay, Palo Alto, CA, UNITED STATES
PI US 2003203467 A1 20031030
AI US 2003-441625 A1 20030519 (10)
RLI Division of Ser. No. US 2000-632570, filed on 4 Aug 2000, PENDING
DT Utility
FS APPLICATION
LREP Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA,
94034-1013
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 2448
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel variant EGIIII or EGIIII-like
cellulases that have improved stability. The variant cellulases have
performance sensitive residues replaced to a residue having modified
stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 5 USPATFULL on STN
AN 2003:265403 USPATFULL
TI Novel variant EGIIII-like cellulase compositions
IN Gualfetti, Peter, San Francisco, CA, UNITED STATES
Mitchinson, Colin, Half Moon Bay, CA, UNITED STATES
Phillips, Jay, Palo Alto, CA, UNITED STATES
PI US 2003186418 A1 20031002
AI US 2003-441626 A1 20030519 (10)
RLI Division of Ser. No. US 2000-632570, filed on 4 Aug 2000, PENDING
DT Utility
FS APPLICATION
LREP Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA,
94034-1013
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 2451

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel variant EGIIII or EGIIII-like cellulases that have improved stability. The variant cellulases have performance sensitive residues replaced to a residue having modified stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 5 USPATFULL on STN
AN 2003:253540 USPATFULL
TI Variant EGIIII-like cellulase compositions
IN Gualfetti, Peter, San Francisco, CA, United States
Mitchinson, Colin, Half Moon Bay, CA, United States
Phillips, Jay, Palo Alto, CA, United States
PA Genencor International, Inc., Palo Alto, CA, United States (U.S. corporation)
PI US 6623949 B1 20030923
AI US 2000-632570 20000804 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP Genencor International, Inc
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 2361

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel variant EGIIII or EGIIII-like cellulases that have improved stability. The variant cellulases have performance sensitive residues replaced to a residue having modified stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 5 USPATFULL on STN
AN 2003:161939 USPATFULL
TI Variant EGIIII-like cellulase compositions
IN Day, Anthony G., San Francisco, CA, United States
Gualfetti, Peter, San Francisco, CA, United States
Mitchinson, Colin, Half Moon Bay, CA, United States
Shaw, Andrew, San Francisco, CA, United States
PA Genencor International, Inc., Palo Alto, CA, United States (U.S. corporation)
PI US 6579841 B1 20030617
AI US 2000-633085 20000804 (9)
RLI Continuation-in-part of Ser. No. US 1998-216295, filed on 18 Dec 1998,

now patented, Pat. No. US 6268328
 DT Utility
 FS GRANTED
 EXNAM Primary Examiner: Gupta, Yogendra N.; Assistant Examiner: Elhilo, Eisa
 LREP Genencor International, Inc.
 CLMN Number of Claims: 21
 ECL Exemplary Claim: 1
 DRWN 5 Drawing Figure(s); 5 Drawing Page(s)
 LN.CNT 1729
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The present invention relates to novel variant EGIII or EGIII-like
 cellulases which have improved stability. The variant cellulases have
 performance sensitive residues replaced to a residue having modified
 stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s l1 (1) (acremonium chrysogenum)
 L10 10 L1 (L) (ACREMONIUM CHRYSOGENUM)

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
12.16	55.08

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-2.77

CA SUBSCRIBER PRICE

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS,
 BIOCCommerce, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,
 CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU,
 DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 14:41:37 ON 09 JUN 2004

70 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
 search error messages that display as 0* with SET DETAIL OFF.

=> s l1 (10a) (acremonium chrysogenum)

12 FILES SEARCHED...

4 FILE CAPLUS

25 FILES SEARCHED...

37 FILES SEARCHED...

52 FILES SEARCHED...

67 FILES SEARCHED...

1 FILE WPIDS

1 FILE WPINDEX

3 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L11 QUE L1 (10A) (ACREMONIUM CHRYSOGENUM)

=> d rank

F1 4 CAPLUS

F2 1 WPIDS

F3 1 WPINDEX

=> file hits

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
2.85	57.93

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-2.77

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FILE 'WPINDEX' ACCESS NOT AUTHORIZED

=> s l11
 L12 5 L11

=> dup rem l12
 PROCESSING COMPLETED FOR L12
 L13 5 DUP REM L12 (0 DUPLICATES REMOVED)
 ANSWERS '1-4' FROM FILE CAPLUS
 ANSWER '5' FROM FILE WPIDS

=> d bib abs 1-5

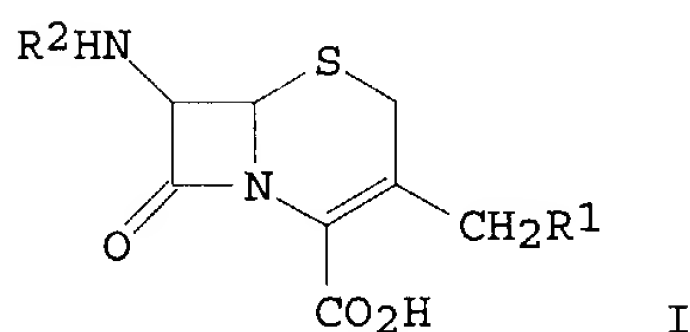
L13 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1992:649981 CAPLUS
 DN 117:249981
 TI Protease C manufacture with Acremonium chrysogenum, and its industrial
 uses
 IN Petkovic, Tomislav
 PA KRKA, tovarna zdravil, p.o., Yugoslavia
 SO Eur. Pat. Appl., 10 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 498452	A2	19920812	EP 1992-102078	19920207
	EP 498452	A3	19921216		
	R: AT, DE, IT, NL				
PRAI	YU 1991-226		19910207		
AB	Protease C is manufactured by aerobic cultures of Acremonium chrysogenum in a medium containing C, N, and mineral sources, vitamins, and amino acids. Uses of protease C in industries related to leather, feed, dairy, textiles, pharmaceuticals, tobacco, and the waste water treatment are also claimed.				

L13 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1992:19724 CAPLUS
 DN 116:19724
 TI Microbial manufacture of 7-aminocephem compounds or salts thereof
 IN Isogai, Takao; Fukagawa, Masao; Iwami, Morita; Aramori, Ichiro; Kojo, Hitoshi
 PA Fujisawa Pharmaceutical Co., Ltd., Japan
 SO Eur. Pat. Appl., 86 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 436355	A2	19910710	EP 1990-313988	19901220
	EP 436355	A3	19911009		

EP 436355	B1	19960508		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 04234994	A2	19920824	JP 1990-338897	19901130
JP 3057759	B2	20000704		
JP 2000152796	A2	20000606	JP 2000-2148	19901130
JP 3239359	B2	20011217		
JP 2001186894	A2	20010710	JP 2000-350331	19901130
AT 137803	E	19960515	AT 1990-313988	19901220
ES 2086386	T3	19960701	ES 1990-313988	19901220
CA 2032963	AA	19910628	CA 1990-2032963	19901221
CA 2032963	C	20020219		
HU 58368	A2	19920228	HU 1990-8442	19901221
HU 212767	B	19961128		
PRAI JP 1989-342113	A	19891227		
JP 1990-193609	A	19900720		
JP 1990-338897	A3	19901130		
JP 2000-2148	A3	19901130		
OS MARPAT 116:19724				
GI				



AB A method for producing 7-aminocephem compds. I (R1 = H, OH, acetoxy) with an *Acremonium chrysogenum* capable of producing II (I, R1 = as above; R2 = C(:O)CO2H, CO2H, CH(NH2)CO2H) transformed with a plasmid encoding enzyme(s) capable of converting II to I. I are precursors of cephalosporin antibiotics. The cephalosporin C acylase (CC acylase) gene of *Pseudomonas diminuta* was cloned. Expression plasmids containing the CC acylase gene (pHBV1), the CC acylase gene and a D-amino acid oxidase gene (pHDV11), and the D-amino acid oxidase gene alone (pHDB3) were prepared. *A. chrysogenum* BC2116 was transformed with these plasmids and cultured. Plasmid pHBV1-containing cultures produced 7-amino-3-acetoxymethyl-3-cephem-4-carboxylic acid (7ACA) and 7-amino-3-hydroxymethyl-3-cephem-4-carboxylic acid (7ADCA). Plasmid pHDV11-containing cultures produced 7ACA, 7ADCA, and 7-(4-carboxybutamido)-3-hydroxymethyl-3-cephem-4-carboxylic acid (GL-7ADCA). Plasmid pHDB3-containing transformants produced GL-7ADCA and 7-(4-carboxybutamido)-3-acetoxymethyl-3-cephem-4-carboxylic acid.

L13 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:507455 CAPLUS

DN 115:107455

TI Cloning and nucleotide sequences of the complementary and genomic DNAs for the alkaline protease from *Acremonium chrysogenum*

AU Isogai, Takao; Fukagawa, Masao; Kojo, Hitoshi; Kohsaka, Masanobu; Aoki, Hatsuo; Imanaka, Hiroshi

CS Explor. Res. Lab., Fujisawa Pharm. Co., Ltd., Tsukuba, 300-26, Japan

SO Agricultural and Biological Chemistry (1991), 55(2), 471-7

CODEN: ABCHA6; ISSN: 0002-1369

DT Journal

LA English

AB cDNA encoding *A. chrysogenum* alkaline protease (Alp) was isolated from the *A. chrysogenum* ATCC11550 cDNA library by express-blot assay. The genomic DNAs encoding *A. chrysogenum* Alp were isolated from the *A. chrysogenum* genomic DNA library using the cloned cDNA as a probe. The 3150 nucleotides of the gene were sequenced. The prepro-Alp-consists of 402 amino acids and 2 intervening sequences are found within the coding

region. The amino acid sequence of A. chrysogenum Alp has 57% homol. to that of Aspergillus oryzae Alp. The entire cDNA encoding A. chrysogenum Alp directed the secretion of enzymically active Alp into the culture medium when expressed in Saccharomyces cerevisiae.

L13 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1981:154893 CAPLUS
 DN 94:154893
 TI Regulation of alkaline exoprotease and cephalosporin C synthesis in Acremonium chrysogenum with various carbon and nitrogen sources
 AU Shuvalova, I. A.; Bartoshevich, Yu. E.
 CS All-Union Res. Inst. Antibiot., Moscow, USSR
 SO Antibiotiki (Moscow) (1981), 26(3), 83-8
 CODEN: ANTBAL; ISSN: 0003-5637
 DT Journal
 LA Russian
 AB When A. chrysogenum was cultivated in a medium containing different C sources, glucose supported maximum growth, followed by maltose, fructose, sucrose, and starch. In contrast, maximum synthesis of alkaline protease [9001-92-7] and cephalosporin C [61-24-5] was observed with starch, followed by sucrose, fructose, maltose, and glucose. The repressive effect of glucose was accompanied by inhibition of arthrospore and conidia formation. Aspartic acid, glutamine, leucine, and norvaline inhibited protease synthesis but stimulated cephalosporin C formation. Methionine and, to a lesser extent, cysteine induced the synthesis of both protease and cephalosporin C and stimulated mycelial fragmentation and sporulation. NH₄⁺, like glucose, repressed the synthesis of protease and cephalosporin and inhibited sporulation.

L13 ANSWER 5 OF 5 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1981-54802D [30] WPIDS
 TI **Acid proteinase** microbiological production - using **Acremonium chrysogenum** strain as enzyme producer for high proteolytic activity.

DC D13 D16
 IN KAMYSHKO, O P; KONEV, Y U; KUZNETSOVA, O S
 PA (ANTI-R) ANTIBIOTICS ENZYMES
 CYC 1

PI SU 779383 B 19801115 (198130)*

PRAI SU 1979-2734475 19790122

AN 1981-54802D [30] WPIDS

AB SU 779383 B UPAB: 19930915

Microbiological production of **acid proteinase** enzyme with milk- clotting activity includes submerged culturing of **Acremonium chrysogenum** L1A-T-049 producer strain. The strain, described as new is separated from local soil sample.

The acid proteinase biosynthesis is conducted in a culture medium comprising (in weight%): corn extract 0.1; soya bean flour 2.0; ammonium sulphate 0.2; glucose 2.0; starch 2; chalk 0.3 and water to 100 ml at pH 6.7-6.8. The above enzyme is non-toxic and when incubated with pepsin it increases the proteolytic activity of pepsin. Milk clotting activity of acid proteinase containing culture medium is 300 units/ml. Clotting period is 1.5 min. Bul.42/15.11.80.

=> s 11 (10a) (acremonium kiliense)

L14 0 L1 (10A) (ACREMONIUM KILIENSE)

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

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SESSION

FULL ESTIMATED COST

47.57

105.50

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

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INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 14:47:38 ON 09 JUN 2004

70 FILES IN THE FILE LIST IN STNINDEX

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41 FILES SEARCHED...
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68 FILES SEARCHED...
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0 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L15 QUE L1 (10A) (ACREMONIUM KILIENSE)

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25 FILES SEARCHED...
38 FILES SEARCHED...
1 FILE IFIPAT
55 FILES SEARCHED...
2 FILE USPATFULL
68 FILES SEARCHED...
0* FILE WPINDEX
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2 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L16 QUE L1 (L) (ACREMONIUM KILIENSE)

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=> d rank
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F2 1 IFIPAT
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FILE 'USPATFULL' ENTERED AT 15:08:00 ON 09 JUN 2004
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FILE 'IFIPAT' ENTERED AT 15:08:00 ON 09 JUN 2004
COPYRIGHT (C) 2004 IFI CLAIMS(R) Patent Services (IFI)

=> file uspatfull		
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CA SUBSCRIBER PRICE

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=> s 116

722087 ACID
419755 ACIDS
741139 ACID
 (ACID OR ACIDS)
42474 PROTEASE
24112 PROTEASES
50523 PROTEASE
 (PROTEASE OR PROTEASES)
722087 ACID
419755 ACIDS
741139 ACID
 (ACID OR ACIDS)
14303 PROTEINASE
3003 PROTEINASES
15528 PROTEINASE
 (PROTEINASE OR PROTEINASES)
1208 ACREMONIUM
5 KILIENSE
4 ACREMONIUM KILIENSE
 (ACREMONIUM(W)KILIENSE)
L17 2 L1 (L) (ACREMONIUM KILIENSE)

=> d bib abs 1-2

L17 ANSWER 1 OF 2 USPATFULL on STN
AN 2003:29832 USPATFULL
TI Use of acid-stable subtilisin proteases in animal feed
IN Sjoeholm, Carsten, Alleroed, DENMARK
Oestergaard, Peter Rahbek, Virum, DENMARK
Kluenter, Anna-Marie, Loerrach, GERMANY, FEDERAL REPUBLIC OF
PI US 2003021774 A1 20030130
AI US 2001-779334 A1 20010208 (9)
PRAI DK 2000-200 20000208
US 2000-183133P 20000217 (60)
DT Utility
FS APPLICATION
LREP PATREA L. PABST, HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER,
1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 1780
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Acid-stable proteases of the subtilisin family, their use in animal
feed, feed-additives and feed compositions containing such proteases,
and methods for the treatment of vegetable proteins using such
proteases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 2 OF 2 USPATFULL on STN
AN 94:3686 USPATFULL
TI Proteolytic enzymes
IN Samal, Babru B., Moor Park, CA, United States
Stabinsky, Yitzhak, Lawrenceville, NJ, United States
PA Amgen, Thousand Oaks, CA, United States (U.S. corporation)
PI US 5278062 19940111

AI US 1992-879507 19920501 (7)
 RLI Continuation of Ser. No. US 1991-696337, filed on 1 May 1991, now
 abandoned which is a continuation of Ser. No. US 1987-35816, filed on 3
 Apr 1987, now abandoned
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Bugaisky, Gabriele
 E.
 LREP Winter, Robert B.
 CLMN Number of Claims: 14
 ECL Exemplary Claim: 1
 DRWN 12 Drawing Figure(s); 23 Drawing Page(s)
 LN.CNT 1080

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This disclosure relates to a novel class of serine proteases isolated
 from a culture medium of fungus *Tritirachium album*. The serine proteases
 disclosed have a high degree of stability in detergent formulations.

In addition, this disclosure relates to a process for producing such
 serine proteases using recombinant techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> log y

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
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CA SUBSCRIBER PRICE	0.00	-5.54

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